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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,982	05/02/2006	Makoto Koizumi	06189/HG	2978
1933	7590	12/05/2008	EXAMINER	
FRISHAUF, HOLTZ, GOODMAN & CHICK, PC			STAPLES, MARK	
220 Fifth Avenue			ART UNIT	PAPER NUMBER
16TH Floor			1637	
NEW YORK, NY 10001-7708				
			MAIL DATE	DELIVERY MODE
			12/05/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action Before the Filing of an Appeal Brief	Application No.	Applicant(s)
	10/577,982	KOIZUMI, MAKOTO
	Examiner	Art Unit
	Mark Staples	1637

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 14 November 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) The period for reply expires 3 months from the mailing date of the final rejection.
- b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because

- (a) They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) They raise the issue of new matter (see NOTE below);
- (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. Applicant's reply has overcome the following rejection(s): _____.

6. Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. For purposes of appeal, the proposed amendment(s): a) will not be entered, or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: 1-5, 12-43 and 52-54.

Claim(s) withdrawn from consideration: 8-11 and 44-52.

AFFIDAVIT OR OTHER EVIDENCE

8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.

12. Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). 06/23/2006

13. Other: _____.

/Kenneth R Horlick/
Primary Examiner, Art Unit 1637

Continuation of 11. does NOT place the application in condition for allowance because:

Applicant's reply has failed to overcome the claim rejections, as follows.

Declaration under 37 CFR 1.132 is Insufficient

The declaration under 37 CFR 1.132 filed 11/14/2008 is insufficient to overcome the rejection of claims 1-5, 12-43, and 52-54 based upon Latorra et al. (2003) and Koizumi et al. as set forth in the last Office action as follows.

The declaration presents the position that Latorra et al. in Table 1 and Figure 2 did not teach a Locked Nucleic Acid (LNA) as the third nucleotide from the 3' end of an oligonucleotide. While Examiner does not agree with this position; regardless it is evident that Latorra et al. teach that Locked Nucleic Acids can be placed in various positions of primers which are oligonucleotides, especially near the 3' end (see the 2nd sentence of the 3rd paragraph on p. 79) and specifically teach the last four nucleotides of primers from the 3' end which includes the third nucleotide. Thus it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to have a LNA as the third nucleotide from the 3' end of an oligonucleotide. Koizumi et al. teach 2'-O,4'-C-ethylene nucleic acid (ENA) units and teach LNA units. Thus, as also given previously, it would have been obvious to simply substitute the ENA units of Koizumi et al. for the LNA units of Latorra et al. to arrive at the claimed invention.

Furthermore, the declaration does not provide evidence that the substituting an LNA or an ENA as third nucleotide from the 3' end results in any unexpected result.

The declaration further presents the argument that Koizumi et al do not teach a modified oligonucleotide used for a protein-DNA molecular interaction. However, the protein which Applicant cites is a polymerase and the modified oligonucleotide is a primer used to elongate/amplify DNA. However, Latorra et al. teach modified primer interactions/amplifications in Polymerase Chain Reaction (PCR, entire article).

In view of the foregoing, when all of the evidence is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness.

Claim Rejections Maintained - 35 USC § 103

The rejection of claims 1-5, 23, 29, and 41 under 35 U.S.C. 103(a) as being unpatentable over Latorra et al. (06/04/2003) and Koizumi et al. (2003) is maintained. Applicant's arguments have been fully considered but they are not persuasive. Applicant's argument in reply are those found in the declaration which are addressed above.

The rejection of claims 12-19 and 52-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Latorra et al., Koizumi et al., and Weston et al. (2002) is maintained. Applicant's arguments have been fully considered but they are not persuasive. Applicant argues that Weston et al. do not teach the claimed modified oligonucleotide. However, Latorra et al. and Koizumi et al. are relied upon for this teaching.

The rejection of claims 20-22, 24-28, 30-40, and 42-43 under 35 U.S.C. 103(a) as being unpatentable over Latorra et al. and Koizumi et al., and further in view of Stanton et al. (2001) is maintained. Applicant's arguments have been fully considered but they are not persuasive. Applicant argues that Stanton et al. do not teach the claimed modified oligonucleotide. However, Latorra et al. and Koizumi et al. are relied upon for this teaching.

Thus the rejections are maintained.

Priority

Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). Receipt has been acknowledged of the certified English translations of the 2003-378039 filed in Japan and 2004-121080 application filed in Japan and submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file (see section 5 of Office Action mailed on 08/20/2008). Copies of the certified copies of the priority documents have been received.

Examiner further confirms and acknowledges the NOTICE OF ACCEPTANCE OF APPLICATION UNDER 35 U.S.C 371 AND 37 CFR 1.495 mailed on 10/06/2006.

/M. S./
Examiner, Art Unit 1637
December 4, 2008

